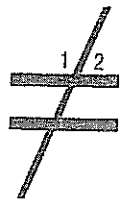
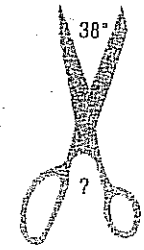
6-1 Name: _____

Line and Angle Relationships

1. **SYMBOLS** The symbol below is an equal sign with a slash through it. It is used to represent *not equal to* in math, as in $1 \neq 2$. If $m\angle 1 = 108°$; classify the relationship between $\angle 1$ and $\angle 2$. Then find $m\angle 2$. Explain your reasoning.



2. **SCISSORS** Arturo opened a pair of scissors so that the angle between the blades is 38°. What is the angle between the handles?

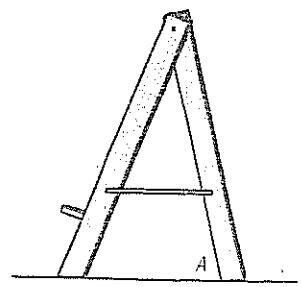


3. **LEG LIFTS** Kiara does leg lifts each morning. For each repetition she lifts her legs 35 degrees off the ground. What is the measure of the angle formed by her body and legs in this position?

4. **ALGEBRA** Angles A and B are complementary. If $m\angle A = 3x - 8$ and $m\angle B = 5x + 10$, what is the measure of each angle?

5. **ALGEBRA** Angles Q and R are supplementary. If $m\angle Q = 4x + 9$ and $m\angle R = 8x + 3$, what is the measure of each angle?

6. **ART** The drawing below shows the side view of a drawing easel.



If $m\angle A$ is 82°, what is the measure of its supplementary angle?